



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,301	12/12/2003	Roger Schron	66489-032-5	7320
25269 7590 08/01/2007 DYKEMA GOSSETT PLLC FRANKLIN SQUARE, THIRD FLOOR WEST 1300 I STREET, NW WASHINGTON, DC 20005			EXAMINER TRAN, VINCENT HUY	
			ART UNIT 2115	PAPER NUMBER
			MAIL DATE 08/01/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/733,301

Applicant(s)

SCHRON, ROGER

Examiner

Vincent T. Tran

Art Unit

2115

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is responsive to the communication filed on 6/8/2007
2. Claims 12-23 are pending for examination.
3. The text of those sections of Title 35, U.S. code not included in this action can be found in a prior Office action.

Priority

The later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (the parent or original nonprovisional application or provisional application). The disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994).

The disclosure of the prior-filed application, PCT/DE02/02215, fails to provide adequate support or enablement in the manner provided by the first paragraph of 35 U.S.C. 112 for one or more claims of this application.

This application is claiming the benefit of prior-filed PCT/DE02/02215 under 35 U.S.C. 120, 121, or 365(c). Copendency between the current application and the prior application is required. Since the applications are not copending, the benefit claim to the prior-filed nonprovisional application is improper. Applicant is required to delete the reference to the prior-filed application from the first sentence(s) of the specification, or the application data sheet,

depending on where the reference was originally submitted, unless applicant can establish copendency between the applications.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoeckl in view of Cochran et al. U.S. Patent No. 5,910,139 ("Cochran"), or Gemunder et al. U.S. Patent No. 6,798,396 ("Gemunder"),

8. As per claim 12, Stoeckl teaches a system for operating a dental chair connected to a computer comprising, one of actuating and status indicators [31, 30, 28, 29, 32-34, S1...S6 fig. 6] disposed on the dental chair,

- a computer interface [23 fig. 2], via which information is transmitted in the form of function codes from the dental chair to the computer [CPU 22 fig. 2] by way of the actuating element [col. 4 lines 11-21],
- a storage area in the computer [24, 35 fig. 2], in which actions assigned to at least one function code are stored [col. 4 lines 53-67],
- wherein the computer has software capable of managing the at least one function code and by means of which the action assigned to the at least one function coded in a saved configuration file in the storage area is initiated [col. 4 lines 11-21, lines 32-43], functions of the software being carried out in a running PC application [col. 5 lines 32-40].
- and wherein the assignment of the at least one function code associated with the actuating elements on the dental chair to prescribed actions are capable of being configured by modifying the configuration file for the software [col. 2 lines 2-10; col. 5 lines 42-45; col. 6 lines 24-26; col. 4 lines 52-67 – the control program can be modified by the user as needed by overwriting the program in 35].

Although Stoeckl teaches a system for operating a dental chair operatively connected to a computer [22 fig. 2] via a serial interface [23 fig. 2]; Stoeckl does not explicitly teach the computer is provided separately from a system under control. However, such feature is old and well know in art of system controller. For example:

Cochran teaches a system for controlling a plurality of microsurgical instruments connected thereto. Specifically, Cochran teaches a computer unit [3 fig. 2] provided separately from the microsurgical instruments base [7 fig. 2] where the computer unit constitutes a user interface by which the user receives information representative of the various operating parameters of the instruments [19 fig. 2] which provide the different functions needed to perform the surgical procedures. Advantageously, the hard drive of the computer unit stores programmable operating parameters for each of the instruments; and by providing information to central processor via the user interface, the user is able to reprogram or select from the operating parameters stored in the hard drive. The computer unit then communicated the operating parameters to instrument as well as to foot assembly and pole assembly via the backplane and external data cable and its network. As taught by Cochran, in this manner, the user is able to optimize the performance of the instruments [col. 13 line 53 to col. 14 line 16].

Gemunder presented another invention relates to foot switch control and interface permitting the operation of a computer by manipulating the foot switch control where the foot switch having a plurality of switch positions and which permits the operator to duplicate the equivalent series of keyboard entries for the operation of computer functions to control dental device 20. Specifically, Gemunder teaches a computer [12 fig. 1] provided separate from the dental device control unit [30 fig. 2] where the control unit and associated software permit the programming of key stroke commands for each of the multiple switch control location; and, once programmed, the keystroke commands are committed to memory (of computer) until it is desired to reprogram the functions and the key stroke command would automatically perform the programmed function once selected switch control depressed [col. 3 lines 7-16, 45-58].

Advantageously, as taught by Gemunder, the program of the computer allows the user to change or modify the particular function associated with each switch control [col. 4 lines 16-22].

As the time of the invention was made, it would have been obvious to one of ordinary skill in the art to have modified the system of Stoeckl with the computer connected separately from the device control unit as discloses by Cochran and Gemunder for the advantage reasons discussed above.

9. As per claim 13, Stoeckl teaches the software includes a dialog box [40 fig. 2] by means of which a user can allocate the at least one function code issuing from the one of the actuating elements and status indicators on the dental chair to predetermined PC actions [col. 6 lines 50-63].

10. As per claim 14, Stoeckl teaches the assignment of the actuating elements depend on the currently active PC application [inherent].

11. As per claim 15, Gemunder teaches the actuating elements [foot switch 30] have different assignments for different PC applications [Fig. 3].

12. Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoeckl/Cochran as applied to claim 12 above, and further in view of Bisch et al. U.S. Patent No. 6,179,829 ("Bisch").

13. As per claim 15, Although, Stoeckl teaches individual applicant for, seating or for a standing treatment can be selected with the selection keys 28, 29; Stoeckl does not explicitly teach the actuating elements, which operable to adjust the specific chair position according to the specific tooth treatment, have different assignments for different applications.

Bisch teaches another apparatus relates to the control of surgical instruments, especially microsurgical and ophthalmic system, by using a foot controls [15 fig. 1], and more particularly, to a surgical foot control connected to a PC [3 fig. 1] with programmable features and functions for specific use in a modular microsurgical system for anterior and posterior ophthalmic surgery. Specifically, Bisch teaches the programmable foot controls (actuating elements) have different assignments for different PC application [col. 14 lines 32-51].

Stoeckl/Cochran and Bisch are analogous art because they from the same field of endeavor; programmable controller for medical devices.

At the time of the invention was made, it would have been obvious to one ordinary skill in the art to have modified the actuating element of Stoeckl/Cochran with the actuating elements have different assignments for different applications as taught by Bisch.

The suggestion/motivation for doing so would have been to provide the actuating element the ability to perform a wide range of function according to the specific mode of the medical device.

Therefore, it would have been obvious to combine Stoeckl/Cochran with Bisch to obtain the invention as specified in claim 15.

14. As per claim 16, Bishch further teaches the information concerning the assignment of the actuating elements is capable of being transmitted from the computer to the dental chair via the computer interface and is made perceptible to the control panel [col. 15 lines 8-2-55].

15. Claims 17-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoeckl in view of Bisch and Gemunder or Cochran.

Stoeckl teaches a method of controlling a dental chair connected to a computer comprising the steps of:

- actuating one of an actuating element and a status indicator disposed on the dental chair [S1...S6, fig. 2] and generating information thereon at the dental chair [col. 5 lines 4-9];
- transmitting the information in the form of at least one function code from the dental chair to the computer;
- comparing the information in the form of the at least one function code with a configuration file in a storage area [24 fig. 2] in the computer; and
- carrying out an action assigned to predetermined information stored in a configuration file [col. 4 lines 8-13; col. 5 lines 32-41];
- wherein the comparison of the information is taken over by software managing the assignment [col. 4 lines 61-65; col. 16-24], and wherein
- the assignment of the at least one function code of the status indicators on the dental chair to the action is specified and is configured by modifying the configuration file [col. 5 lines 42-48; col. 6 lines 24-30].

Although, Stoeckl teaches the comparison of the information is taken over by software managing the assignment wherein the software automatically correcting all of the program in memory 24 according to the specific selected working position of the user. Stoeckl does not teach the comparison is independent of the PC applications used, by means of which the action is carried out, by opening or closing of a PC application.

Bisch teaches another apparatus relates to the control of surgical instruments, especially microsurgical and ophthalmic system, by using a foot controls [15 fig. 1], and more particularly, to a surgical foot control connected to a PC [3 fig. 1] with programmable features and functions for specific use in a modular microsurgical system for anterior or posterior ophthalmic surgery. Specifically, Bisch teaches the comparison of the information is taken over by software managing the assignment [*inherent since the foot control is assign to perform different function according to different mode of operation-col. 14 lines 47-51*] and independent of the PC applications used, by means of which the action is carried out, by opening of closing of a PC application [*inherent – depended on the whether the system is in anterior or posterior ophthalmic surgery mode; the comparison is independent of the surgery application; col. 2 lines 48-55; col. 3 lines 30-36*].

At the time of the invention was made, it would have been obvious to one ordinary skill in the art to have modified the actuating element of Stoeckl with the comparison of information that is independent of the PC application by means of opening or closing of a PC application as taught by Bisch.

The suggestion/motivation for doing so would have been to provide the actuating element the ability to perform a wide range of function according to the specific mode of the medical device.

Although Stoeckl and Bisch both teaches a system for operating a dental chair and/or physician equipment operatively connected to a computer via a serial interface ; Stoeckl and Bisch does not explicitly teach the computer is provided separately from a system under control. However, such feature is old and well know in art of system controller. For example:

Gemunder and Cochran both teaches the computer connected separately from the device control unit [see discussion in claim 12].

Therefore, it would have been obvious to combine Stoeckl with Bisch and Gemunder and/or Cochran to obtain the invention as specified in claim 17.

16. As per claim 18, Bisch teaches the software specifies the assignment of said at least one function code issuing from the status indicator on the dental chair to predetermined PC actions in a dialog box [fig. 12].

17. As per claim 19, Bisch teaches the software provide means for storing a number of different configuration [inherent].

18. As per claim 20, Bisch teaches the assignment of the actuating element is dependent of the currently active PC application [col. 14 47-51].

19. As per claim 21, Bisch teaches in different PC application different actions are assigned to the actuating element concern [col. 14 lines 47-51].

20. As per claim 22, Stoeckl teaches the assignments are display on the control panel of the system [col. 5 lines 42-52].

21. As per claim 23, Stoeckl teaches a PC context that is retuned via a computer interface is indicated on a control panel [col. 5 lines 42-52].

Conclusion

22. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Examiner's note:

Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Prior Art not relied upon:


Please refer to the references listed in attached PTO-892, which, are not relied upon for claim rejection since these references are relevant to the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vincent T. Tran whose telephone number is (571) 272-7210. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas c. Lee can be reached on (571) 272-3667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Vincent Tran



THOMAS LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100